

REMARKS

Claims 1, 3, 6-8, 10, 11, 13 and 15 have been amended to improve form, claims 2, 4, 9 and 14 have been canceled without prejudice or disclaimer and new claims 19 and 20 have been added. Claims 1, 3, 5-8, 10-13 and 15-20 are now pending in this application.

Claims 1-4 and 6-18 have been rejected under 35 U.S.C. § 102(e) as being anticipated by Kalkunte et al. (U.S. Patent No. 6,813,268; hereinafter Kalkunte). The rejection is respectfully traversed.

Claim 1 recites a network device that includes a timer, an aging device and interrupt logic. The aging device is configured to receive a signal from the timer and initiate an aging process on a first address table. Claim 1, as amended, recites that the interrupt logic is configured to receive the signal from the timer and transmit an interrupt signal to an external device associated with managing the operation of the network device, where the interrupt signal indicates that the aging process on the first address table has been initiated. Claim 1, as amended, further recites that the external device stores a second address table corresponding to the first address table stored in the memory of the network device, each entry in the second address table including an address hit field and an aging override field, and wherein the interrupt signal causes the external device to determine whether to at least one of delete or invalidate an entry in the second address table based on information in the address hit field and the aging override field of the second address table. Kalkunte does not disclose or suggest these features.

For example, Kalkunte discloses that switch-on-chip (SOC) 10 includes address resolution logic and layer 3 (ARL/L3) tables 21a-c (Kalkunte – Fig. 2). Each ARL/L3 table 21a-c is associated with an Ethernet port interface controller (EPIC) 20a-20c (Kalkunte – col. 5, lines 10-40). Kalkunte also discloses that when one of the ARL/L3 tables 21 is updated to include a new

source address, a hit bit is set and an S channel message is placed on S channel 83 to instruct all ARL/L3 tables 21 on SOC 10 to learn this new address (Kalkunte – col. 22, lines 34-50). Kalkunte further discloses that CPU management interface controller (CMIC) 40 will also send the address information to CPU 52 (Kalkunte – col. 22, lines 50-64).

These portions of Kalkunte, however, do not disclose or suggest that either CPU 52 or any of the EPICs 20a-20c on SOC 10 receive an interrupt signal and determine whether to at least one of delete or invalidate an entry in a second address table based on an address hit field and an aging override field included in the second address table, as required by amended claim 1. In contrast, Kalkunte discloses a table synchronization process in which if one of ARL/L3 tables 21a-c is updated, the new address information is forwarded to the other ARL/L3 tables 21a-c and to CPU 52.

Kalkunte further discloses that each EPIC module 20 includes an aging timer and performs an aging process on its ARL/L3 table 21 (Kalkunte – col. 22, line 65 to col. 23, line 29 and Fig. 18). This portion of Kalkunte, however, does not disclose or suggest that any of the timers associated with any of the EPIC modules 20 transmit an interrupt signal to an external device associated with managing the operation of SOC 10, presumably CPU 52 in Kalkunte. This portion of Kalkunte does not further disclose that an interrupt signal transmitted by SOC 10 causes the external device associated with managing the operation of the network device to determine whether to at least one of delete or invalidate an entry in a second address table stored in the external device based on information in the address hit field and the aging override field of the second address table, as required by amended claim 1.

In contrast, Kalkunte merely discloses that each EPIC 20 performs an aging process on its own ARL/L3 table 21 based on its own aging timer and when an entry is to be deleted in one of the

tables 21a-c, that information is provided on the CPS channel to the other ARL/L3 tables 21 and to CPU 52 via CMIC 40 (Kalkunte – col. 22, line 65 to col. 23, line 29). In other words, Kalkunte merely discloses that if any ARL entry is deleted during an aging process, a delete ARL entry message is sent on the CPS channel to the other modules, including CMIC 40, so that the other tables may be synchronized (Kalkunte – col. 23, lines 15-19). This is not equivalent to and does not suggest that CPU 52 of Kalkunte receives an interrupt signal and determines whether to at least one of delete or invalidate an entry in its own address table based on information in the address hit field and the aging override field of its own address table, as required by amended claim 1.

For at least these reasons, Kalkunte does not disclose or suggest each of the features of claim 1. Accordingly, withdrawal of the rejection and allowance of claim 1 are respectfully requested.

Claims 3, 6 and 7 are dependent on claim 1 and are believed to be allowable over Kalkunte for at least the reasons claim 1 is allowable. In addition, these claims recite additional features not disclosed or suggested by Kalkunte.

For example, claim 6 recites that the aging process performed on the first address table is substantially synchronized with an aging process performed on the second address table stored in the external device, and the interrupt signal causes the external device to determine whether to delete or invalidate an entry in the second address table independently from the aging process performed on the first address table. As discussed above, Kalkunte discloses that CPU 52 may receive information via CMIC 40 when an entry is deleted from one of ARL/L3 tables 21a-c (Kalkunte – col. 23, lines 15-19). Kalkunte does not disclose or suggest that CPU 52 receives an interrupt signal that causes CPU 52 to determine whether to delete or invalidate an entry in its own address table independently from the aging process performed on the first address table, as

required by amended claim 6. For at least this additional reason, withdrawal of the rejection and allowance of claim 6 are respectfully requested.

Claims 8 and 15, as amended, recite features similar to claim 1. For reasons similar to those discussed above with respect to claim 1, Kalkunte does not disclose or suggest each of the features of claims 8 and 15. Accordingly, withdrawal of the rejection and allowance of claims 8 and 15 are respectfully requested.

Claims 10-13 are dependent on claim 8 and claims 16-18 are dependent on claim 15. These claims are believed to be allowable over Kalkunte for at least the reasons their respective independent claims are allowable. Accordingly, withdrawal of the rejection and allowance of claims 10-13 and 16-18 are respectfully requested.

Claim 5 has been rejected under 35 U.S.C. § 103 as being unpatentable over Kalkunte in view of Szczepanek et al (U.S. Patent Publication No. 2003/0110344; hereinafter Szczepanek). The rejection is respectfully traversed.

Claim 5 is dependent on claim 1 and is believed to be allowable for at least the reasons claim 1 is allowable. Szczepanek does not remedy the deficiencies in Kalkunte discussed above with respect to claim 1. For at least these reasons, withdrawal of the rejection and allowance of claim 5 are respectfully requested.

NEW CLAIMS

New claims 19-20 have been added. These claims depend on claims 8 and 15, respectively, are believed to be allowable for at least the reasons their respective independent claims are allowable. In addition, these claims recite features not disclosed or suggested by the art of record.

For example, claim 19, recites that the aging process performed on the second address table is performed independently from the aging process associated with the first address table. Claim 20 recites a similar feature. Similar to the discussion above with respect to claim 6, the cited art of record does not disclose or suggest this feature. Accordingly, allowance of claims 19 and 20 is respectfully requested.

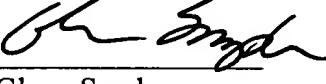
CONCLUSION

In view of the foregoing amendments and remarks, the applicant respectfully requests withdrawal of the outstanding rejection and the timely allowance of this application.

To the extent necessary, a petition for an extension of time under 37 C.F.R. § 1.136 is hereby made. Please charge any shortage in fees due in connection with the filing of this paper, including extension of time fees, to Deposit Account 50-1070 and please credit any excess fees to such deposit account.

Respectfully submitted,

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